

ABSTRACT

An inventive optical functional device includes: two optical waveguides having mutually different equivalent refractive indices; and a connection through which the two optical waveguides are connected along an optical axis. The two optical waveguides are provided as a first optical waveguide, and a second optical waveguide having an equivalent refractive index lower than that of the first optical waveguide, respectively. The connection, through which the first and second optical waveguides are connected along the optical axis, is formed by selectively enlarging the width of the second optical waveguide, and is allowed to function as a multimode interference waveguide. The connection allows multimode propagation of a light passing through the second optical waveguide, and allows the light to be coupled into the first optical waveguide.